

## USBI receives major ozone protection award

USBI Co., a subsidiary of United Technologies Corporation and part of Pratt & Whitney Propulsion Operations, has been awarded the 1995 Stratospheric Ozone Protection Award by the United States Environmental Protection Agency.

USBI was presented with the award for work performed on replacing the chemical 1,1,1-Trichloroethane (methyl chloroform) as a hand-wipe solvent, previously used on more than 2,000 processes performed by USBI on the Space Shuttle's solid rocket boosters (SRBs).

This effort began in 1991 when USBI was issued a directive to assess the impact of environmental regulations on the materials and processes used on the Shuttle's SRBs.

"Searching and testing for replacement materials that met all manned space flight specifications was not an easy task," said Richard Beagley, USBI director of Safety, Reliability and Quality Assurance.

"Initial assessment indicated one of the materials and processes which would be significantly impacted by concern for the ozone layer was hand-wipe cleaning, a manual contamination removal procedure."

Hand-wipe cleaning accounted for approximately 27 percent of the total Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs) emission at USBI's KSC production site.



DICK BEAGLEY, USBI director of Safety, Reliability and Quality Assurance, and Catherine Clayton, USBI's supervisor of Lab Operations and Test, accepted the 1995 Stratospheric Protection Award for USBI.

Catherine Clayton, supervisor of USBI Lab Operations and Test, conducted thousands of tests involving contaminants and cleaners, finally identifying two aqueous and two low volatile cleaners as substitutes which do not contain any listed hazardous materials or ozone depleters.

"Their use will result in a decrease of hazardous waste from solvent contaminated wipes by 3,000 pounds a year," she said. "In addition, these cleaners reduce the potential exposure to employees and lessens the generation of air pollutants by 6,000 pounds a year."

## KSC sharing safety methods with Japan

Kennedy Space Center is helping shape the Japanese space agency's safety program. NASA safety engineers recently answered questions from the National Space Development Agency of Japan (NASDA) regarding the Shuttle's solid rocket motors (SRM) and the SRM retrieval methods.

Though the two space agencies have been sharing information since NASDA's inception in 1969, NASDA's direct application of KSC's safety procedures is especially flattering, KSC safety officials said. "We have an ongoing relationship with their safety engineers — a mutual sharing of information," said KSC's Safety and Reliability Director Joel Reynolds.

NASDA safety engineers have visited KSC several times beginning in 1992 when they observed the first Japanese astronaut on the Spacelab-J mission and compared notes on launch and ground operations safety. More recently, NASDA Senior Safety Engineer Yukio Hyodo, Associate Senior Engineer Ryuichi Asano, and Nissan's General Manager of Research and Development programs, Katsuaki Kosaka visited Nov. 8. "The most significant part of their visit was a three-hour question and answer session between both agencies," said Bruce Jansen, KSC's deputy director of Safety.

## Certified manager preparatory classes offered at KSC

Kennedy Space Center employees can take advantage of a course designed to prepare candidates for the examination leading to the certified manager certification.

The course is being offered by the McDonnell Douglas Management Association and will be taught by Certified Managers Wendell Wilkins, Charley Smith, and Denise DeVito.

The certified manager (CM) is a credential for managers based on an examination program, similar to the certified public accountant (CPA) designation in accounting or the professional engineer (PE) in engineering. The CM designation sets minimum professional standards based on education, experience and competency. To qualify to sit for the exam, individuals must have a combination of management experience and education.

An eligibility worksheet included in the Institute of Professional Managers (ICPM) application package will help potential applicants determine whether they meet criteria for testing. For those who meet only one of the two criteria of education and experience and pass the certification examination, there is the associate certified manager designation. When all of the criteria are met, the associate CM designation is upgraded to certified manager.

The six-hour test is divided into three parts. Applicants can take one, two or all three parts at a time. Each part covers a basic area in management:

CM-1 -- Personal skills: Professionalism, personal organization, self development and the managerial personality.

CM-2 -- Administrative skills: Planning objectives, scheduling, implementing the plan, control process and administrative

knowledge.

CM-3 -- Interpersonal skills: Leadership, employer/employee relationships, motivation, interpersonal relationships and group dynamics.

The examination covers 45 specific management competencies including ethics, time management, leadership, employee relations, motivation, control decision making, and communications.

Although the preparatory course was scheduled to begin this week, arrangements could be made to enable anyone starting the course late to catch up. The class will be held in the Space Station Processing Facility, Room 2094, and will cost \$40 for members of the McDonnell Douglas Management Association and \$45 for non-members. For further information on the preparatory course, call 867-5663.